

In the Claims

Amend the Claims as follows:

1. (Currently amended) A magnetic data storage device array,
comprising:

a stripe of magnetic material having a uniform width and depth along its longitudinal length, and a front side and a back side, and able to store electronic data as a magnetic recording comprising a plurality of bits;

at least one magnetic write head permanently positioned on said back side of the magnetic stripe at a particular data bit location of one of said plurality of bits, and providing for electronic-magnetic alteration of a data bit so as to be magnetically readable on said front side; ~~and~~

~~a magnetic recording serially accessible to a longitudinally moving read head on said front side of the stripe that includes said data bit affected by the magnetic write head;~~

wherein, said front side of the stripe of magnetic material is such that said read head has available to it a continuous, homogeneous, and uninterrupted surface to shuttle along.

2. (Currently amended) The magnetic data storage ~~device~~ array of claim 1, wherein the magnetic write head further comprising comprises:

~~a user access record encoded within the magnetic recording.~~

an independently addressable coil with an electromagnetic field coupling to a magnetic core with a field gap all embedded in a supporting carrier adjacently beneath the stripe of magnetic material.

3. (Currently amended) The magnetic data storage ~~device~~ array of claim 1, further comprising:

a magnetic recording serially accessible to a read head moving longitudinally on the surface of said front side of the stripe, and that includes at least one data bit writeable by the magnetic write head and another set of data bits only writeable directly by a card programmer; and

a financial account ~~number~~ access code of a user encoded within the magnetic recording; and

a controller connected to the magnetic write heads and providing for ~~a subsequent~~ obfuscation of the financial account number by ~~re-recording of said data bit~~ automatic re-programming of the magnetic recording to disallow a second use of the same code and to complicate a correct guess of a proper next code.

4. (Currently amended) The magnetic data storage ~~device~~ array of claim 1, further comprising:

~~a usage counter record encoded within the magnetic recording; and~~

a controller connected to the magnetic write heads and providing for ~~a subsequent incrementing of the usage counter record by re-recording said data bit~~ de-magnetization of said data bits a preset amount of time after being programmed so as to counteract persistent bit magnetization in a coercive media.

5. (Currently amended) The magnetic data storage ~~device~~ array of claim 4, further comprising:

a detectors connected to signal the controller when a reading of data in the magnetic recording has occurred and thereby trigger removing at least parts of the present magnetic recording and the encoding and programming of a next one.

6. (Currently amended) A ~~magnetic storage device~~ payment card, comprising:

a plastic card configured for use in a conventional merchant point-of-sale magnetic-stripe card reader;

~~a stripe of magnetic material having a longitudinal length, and a front side and a back side, and able to store~~

~~electronic data as a magnetic recording comprising a plurality of bits;~~

a magnetic stripe disposed on the reverse surface of the plastic card and conforming to industry-compatible configurations, formats, and encodings to make magnetic recordings accessible to a plurality of said card readers and writeable by a card programmer;

~~an array of magnetic transducer write heads permanently positioned on said back side of the stripe in a particular series of said plurality of bits, and providing for electronic magnetic alteration of corresponding data bits magnetically readable on said front side~~ embedded beneath the magnetic stripe; and

a flat uniform exposed surface on the magnetic stripe uninterrupted by wires or gaps and providing for a magnetic recording serially accessible to a longitudinally moving read head ~~on said front side of the stripe that~~ in which the magnetic recording includes said some data bits affected that can be programmed and demagnetized by the array of magnetic-transducer write heads.

7. (Currently amended) The magnetic data storage ~~device~~ array of claim 6, further comprising:

a controller connected to the array of magnetic transducer write heads, and providing for an incrementing of a usage-counter record subsequent to each use.

8. (Currently amended) A magnetic data storage ~~device~~ array, comprising:

a stripe of magnetic material having a longitudinal length, and a front side and a back side, and able to store electronic data as a magnetic recording comprising a plurality of bits;

an array of magnetic transducer write heads permanently positioned on said back side of the stripe that constitutes a whole series of said plurality of bits, and providing for electronic-magnetic alteration of corresponding data bits magnetically readable on said front side; and

a magnetic recording serially accessible to a longitudinally moving read head on said front side of the stripe that only includes said data bits affected by the array of magnetic-transducer write heads.

9. (Currently amended) A method for preventing unauthorized use of a payment card, comprising:

recording from beneath and in parallel a user payment account number as a serial magnetic recording on a magnetic stripe of a user payment card;

detecting each magnetic reading from above and shuttling along of said magnetic stripe by an external magnetic reader; and

re-recording in parallel ~~at least one bit of~~ said serial magnetic recording from ~~a backside of~~ beneath said magnetic stripe and internal to said user payment card.

10. (Currently amended) The method of claim 9, wherein:

the step of re-recording is in response to the step of detecting and obfuscates said user payment account number to prevent unauthorized subsequent readings.

11. (Currently amended) The method of claim 9, wherein:

the step of re-recording is in response to the step of detecting and obfuscates said user payment account number after a delay to prevent unauthorized subsequent readings within a predetermined time frame.

12. (Currently amended) A business model method, comprising:

including on an otherwise conventional plastic user payment card with a magnetic stripe a means to generate and write a progressing code number to said magnetic stripe from beneath and completely within said plastic user payment card without the support of an external card reader or writer;

advancing incrementing a current usage-counter code number on the magnetic stripe of a user payment card each time the card is magnetically swiped during an authorized transaction;

maintaining a last validly used usage-counter code number by a payment authorization center for each particular user;

checking each transaction presented for authorization to see if said current usage-counter code number properly exceeds said last validly used usage-counter number; and

declining a transaction if said current usage-counter code number does not exceed said last validly used usage-counter number.

13. (New) A payment card, comprising:

a plastic carrier conforming in size, material characteristics, and shape to an industry standard for a credit card;

a magnetic stripe disposed on a reverse surface of the plastic carrier and conforming in size, material characteristics, and shape to said industry standard for said credit card;

a plurality of magnetic write heads disposed beneath the magnetic stripe and within the plastic carrier and able to magnetically program in parallel corresponding bits in a coded string of bits;

a data generator disposed within the plastic carrier and connected to the plurality of magnetic write heads to enable changes to made to said coded string of bits; and

a use detector disposed within the plastic carrier for sensing when a card reader has been used to read said coded string of bits and to trigger the data generator to produce a next coded string of bits.